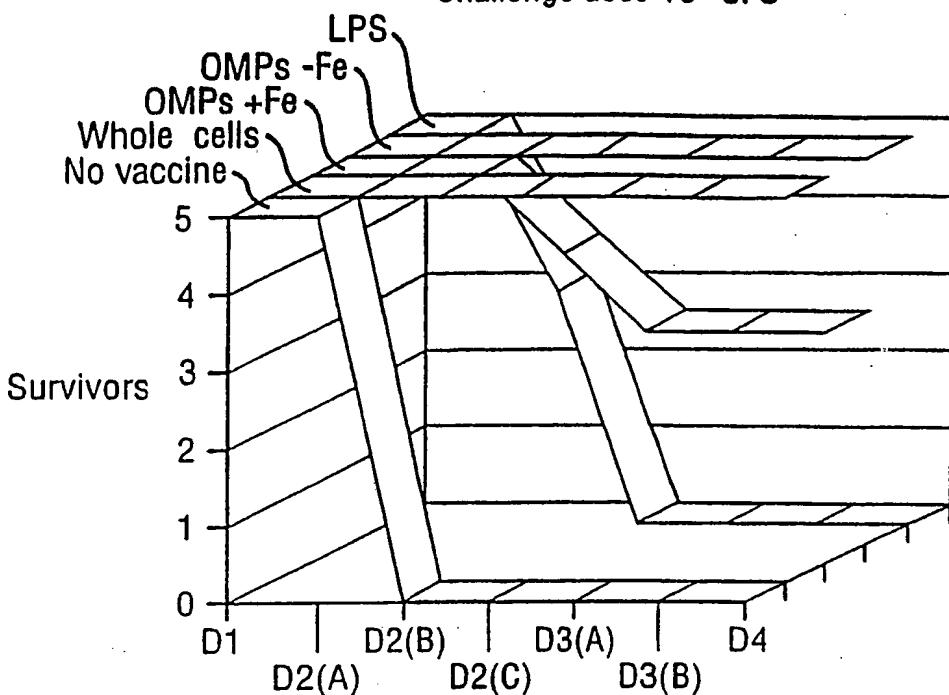




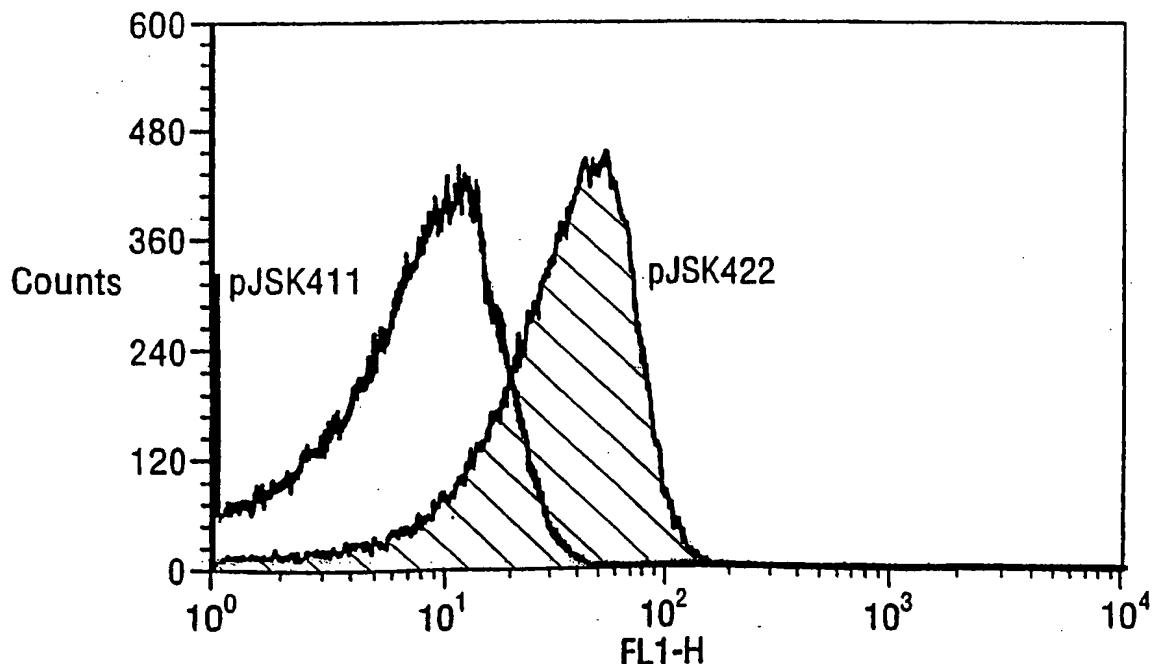
Replacement Sheet  
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Appl. No. 09/942,583; Filed: Aug 31, 2001  
Dkt No. 1581.0840001/RWE/FRC; Group Unit: 1645  
Inventors: ROBINSON et al.  
Tel. No.: 202-371-2600  
For: Neisserial Vaccine Compositions and Methods

**FIG.1**

Challenge dose  $10^8$  CFU



**FIG.6**



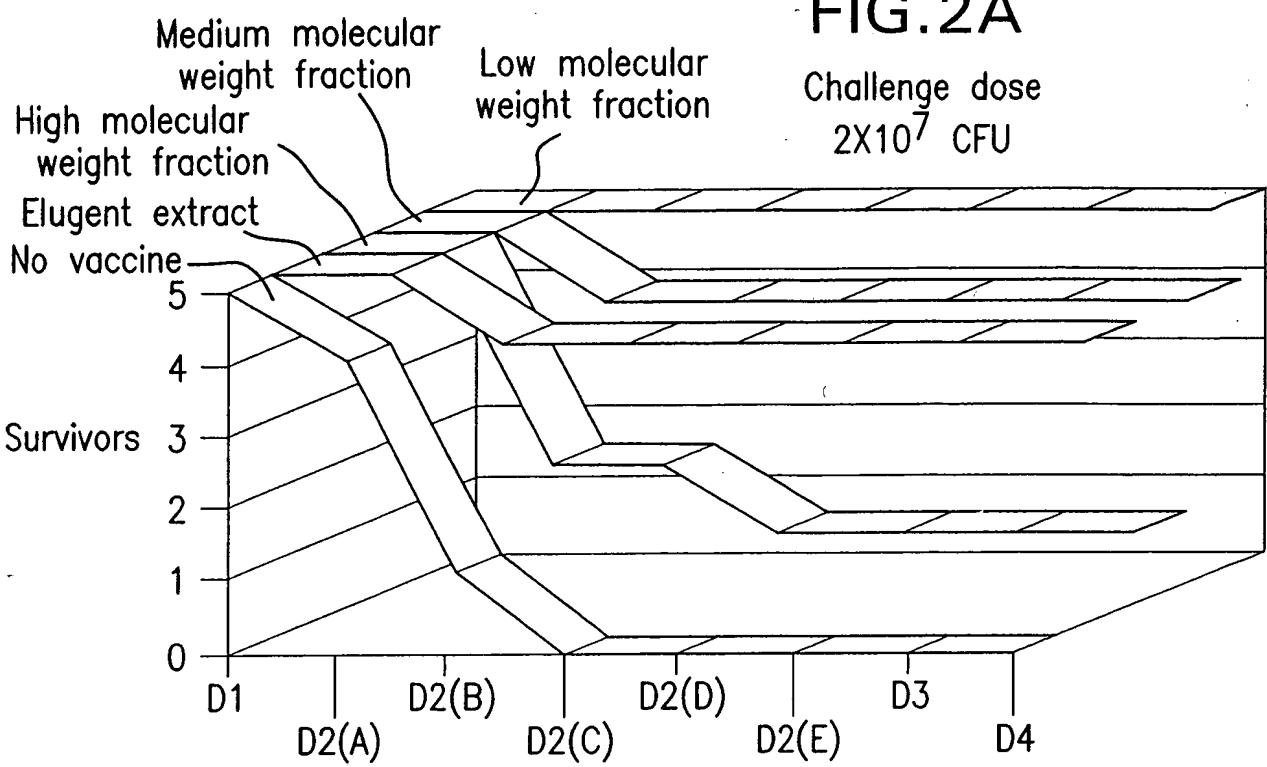


FIG.2A

Challenge dose  
 $2 \times 10^7$  CFU

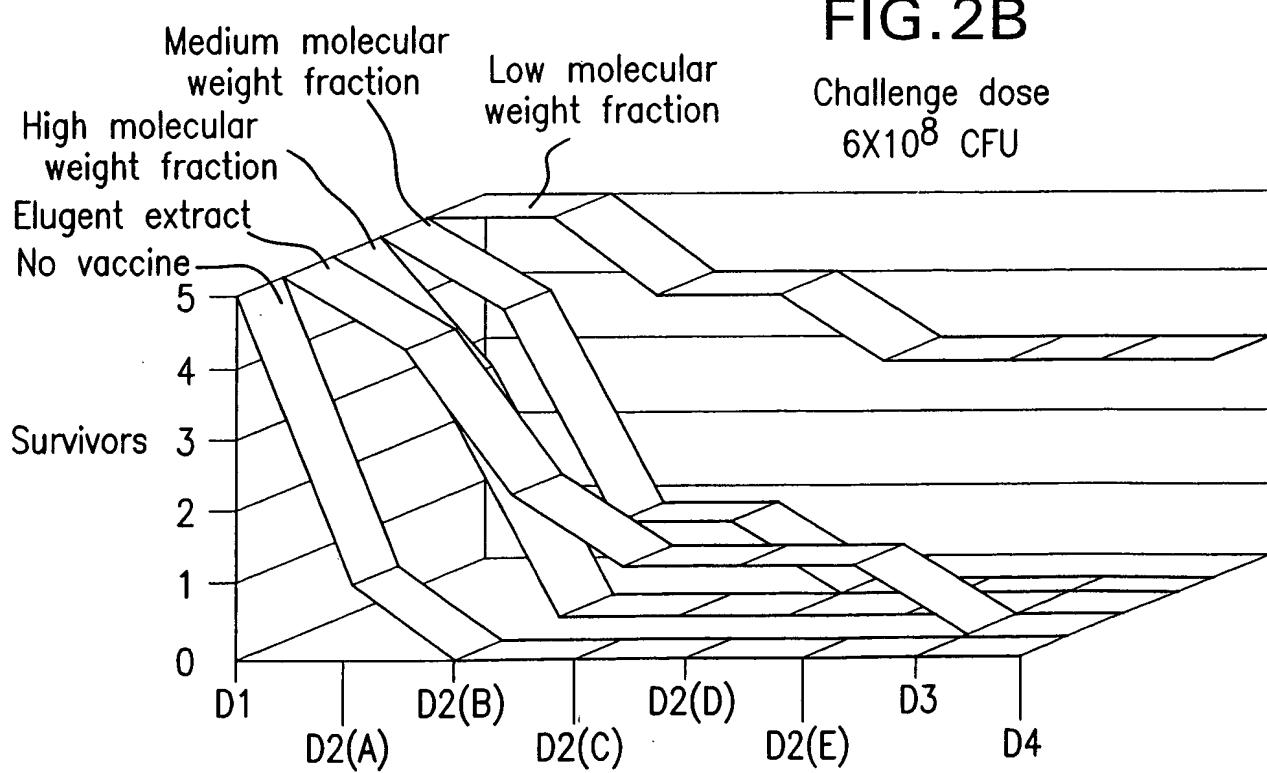


FIG.2B

Challenge dose  
 $6 \times 10^8$  CFU

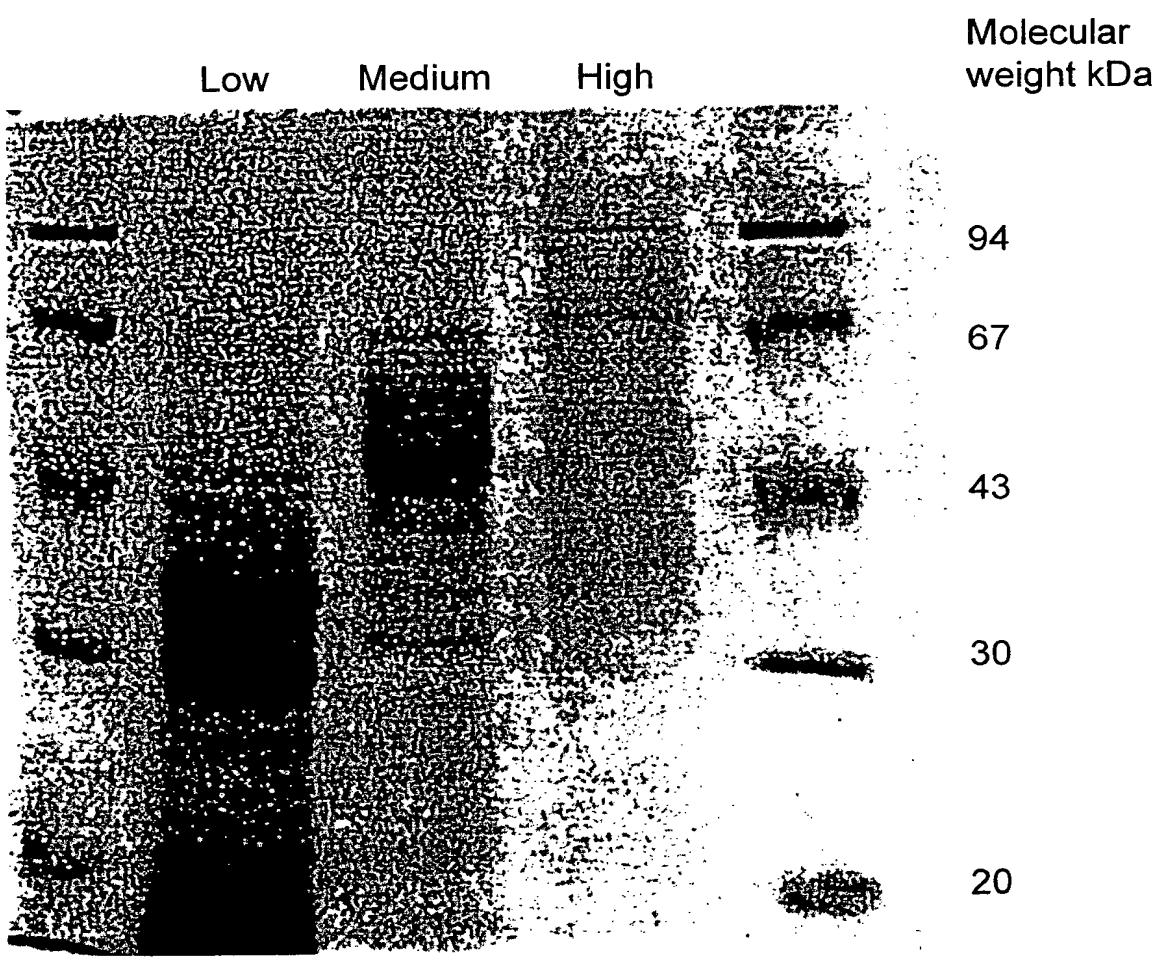


FIG.2C

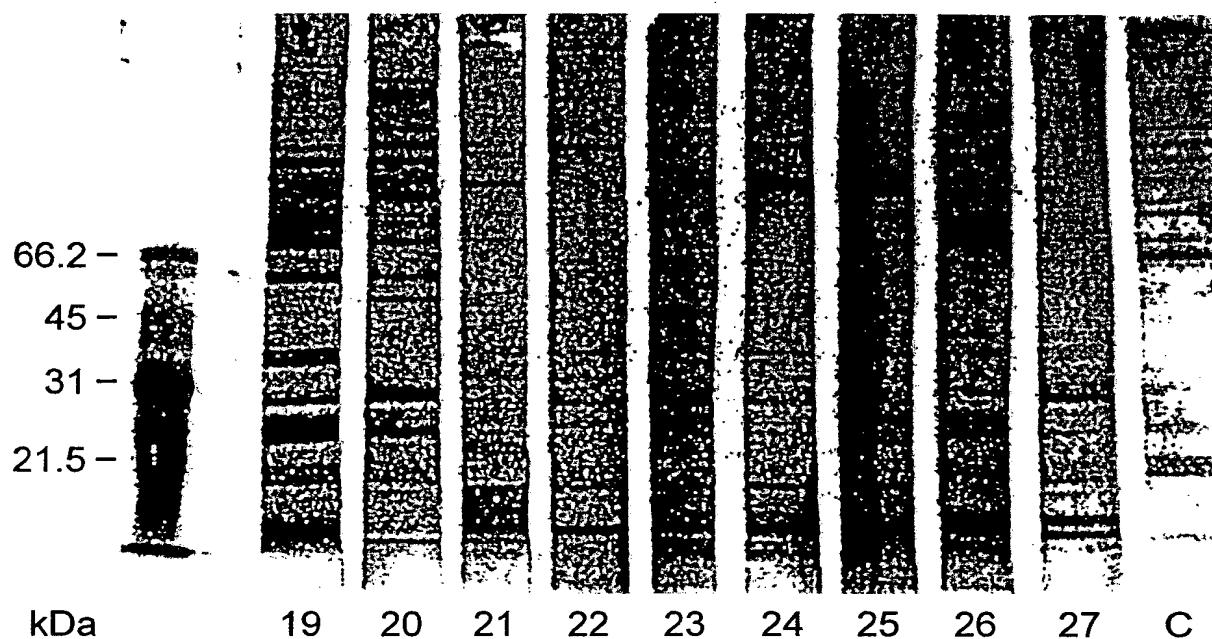


FIG.3

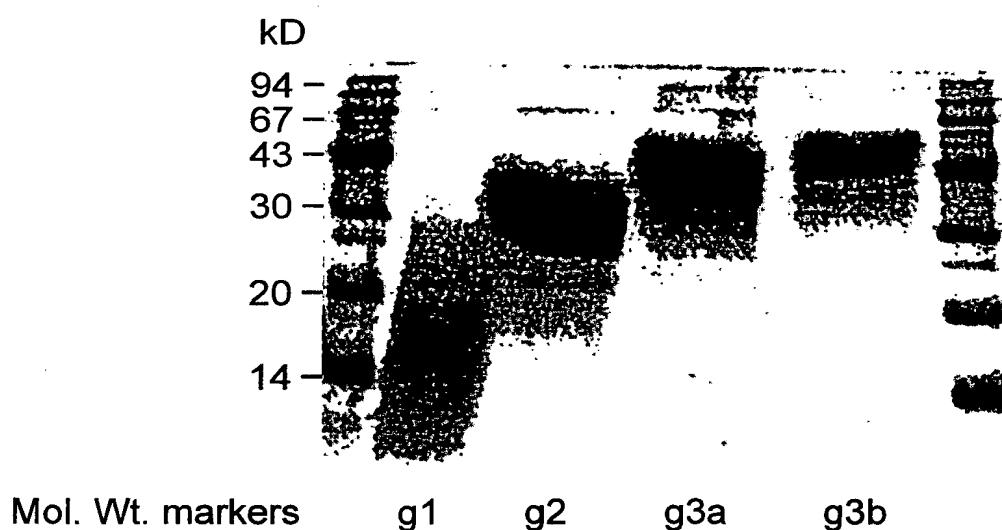


FIG.4

FIG. 5A

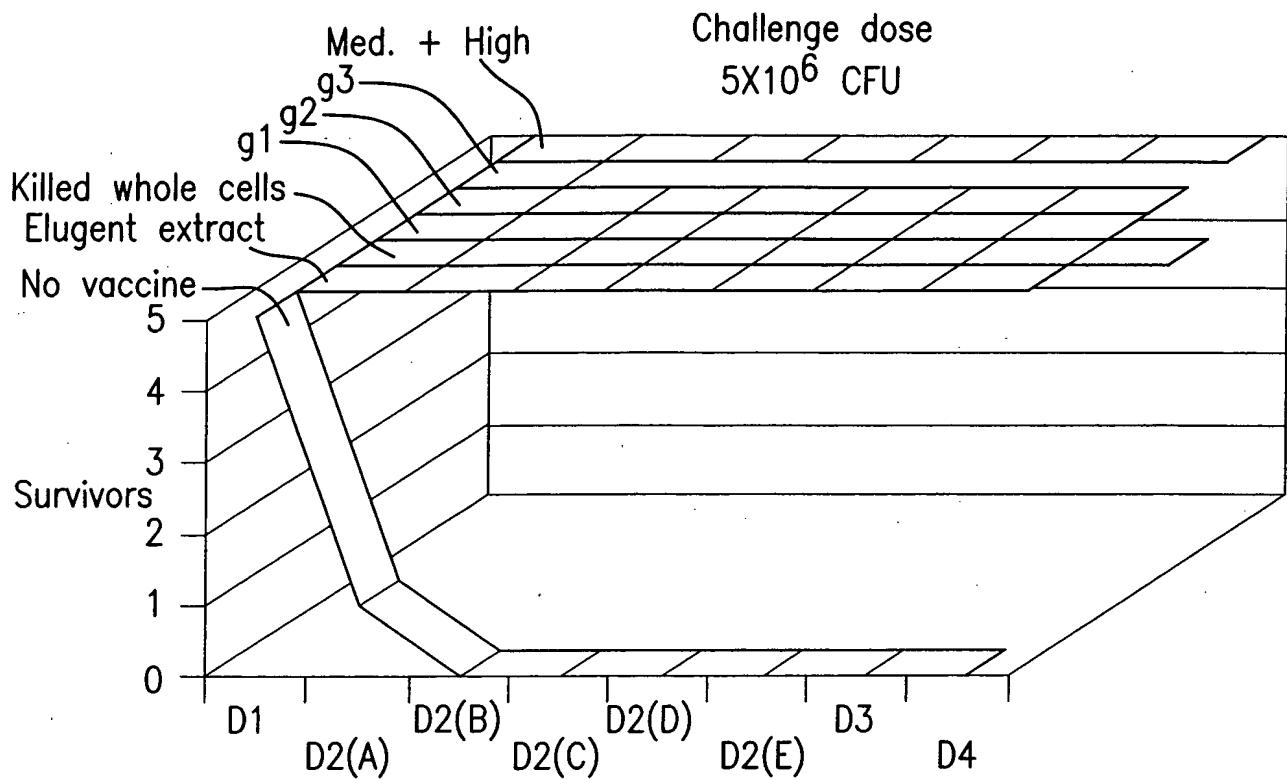
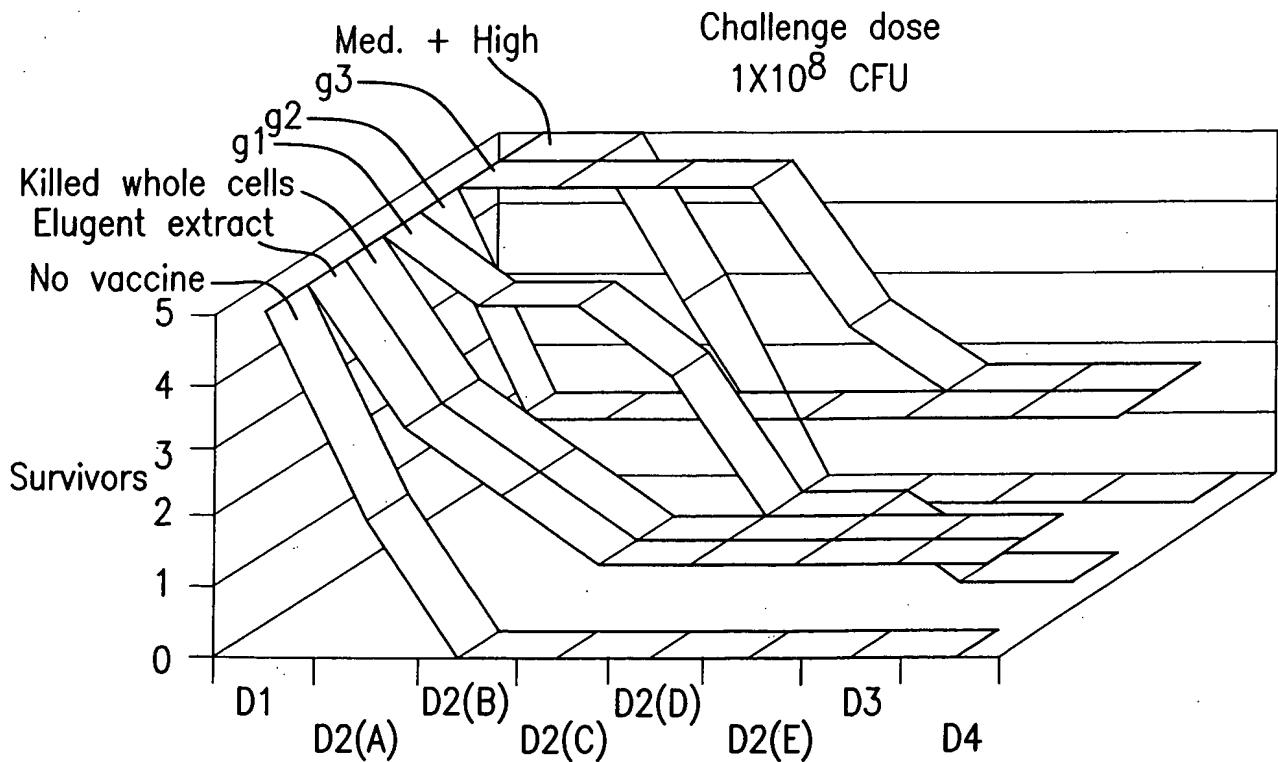


FIG. 5B



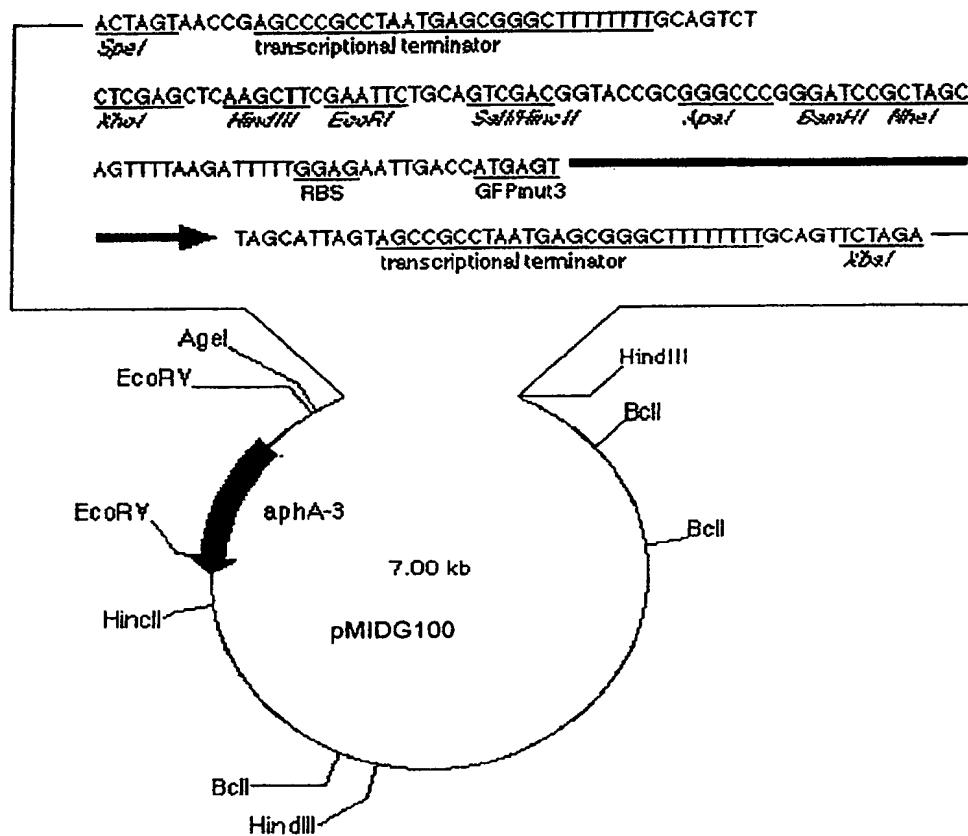
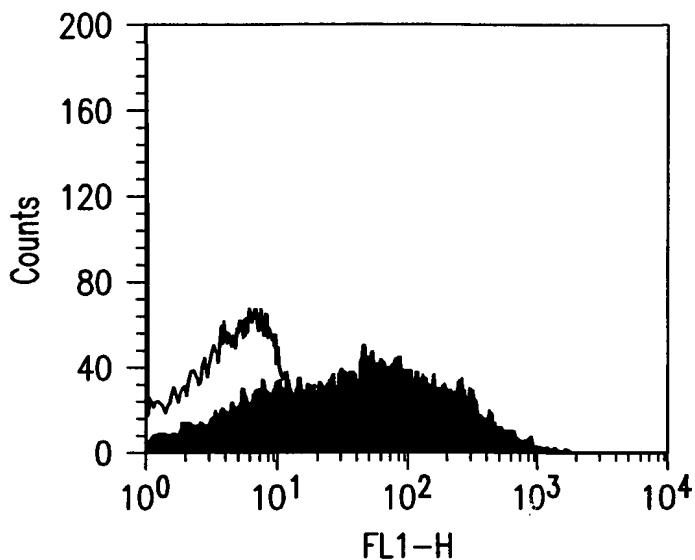
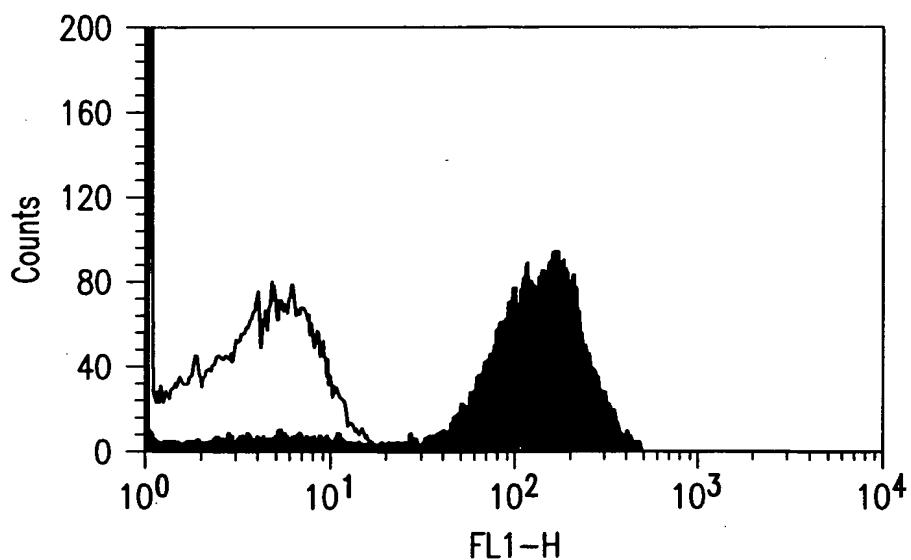


Fig. 7



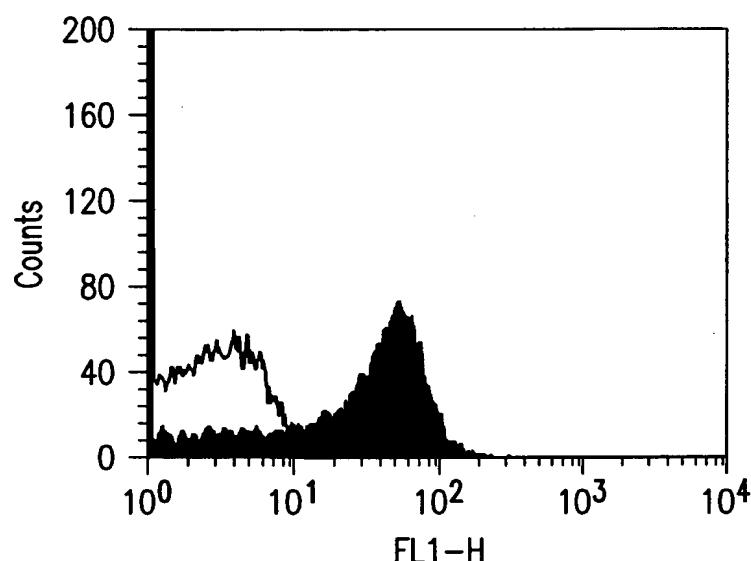
Key	Name	Parameter	Gate
—	N. cinerea NRL32165 pMIDG100	FL1-H	G1
■	N. cinerea NRL32165 pMIDG101	FL1-H	G1

FIG.8A



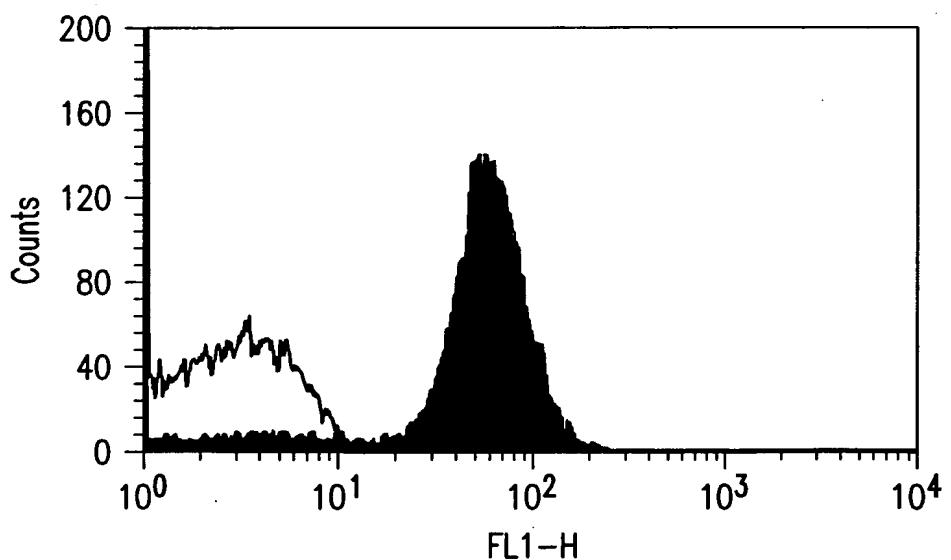
Key	Name	Parameter	Gate
—	N. flava NRL30008 pMIDG100	FL1-H	G1
■	N. flava NRL30008 pMIDG101	FL1-H	G1

FIG.8B



Key	Name	Parameter	Gate
—	N. sicca M98-252234 pMIDG100	FL1-H	G1
■	N. sicca M98-252234 pMIDG101	FL1-H	G1

FIG.8C



Key	Name	Parameter	Gate
—	N. subflava NRL30017 pMIDG100	FL1-H	G1
■	N. subflava NRL30017 pMIDG101	FL1-H	G1

FIG.8D

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Tel. No.: 202-371-2600  
For: Neisserial Vaccine Compositions and Methods

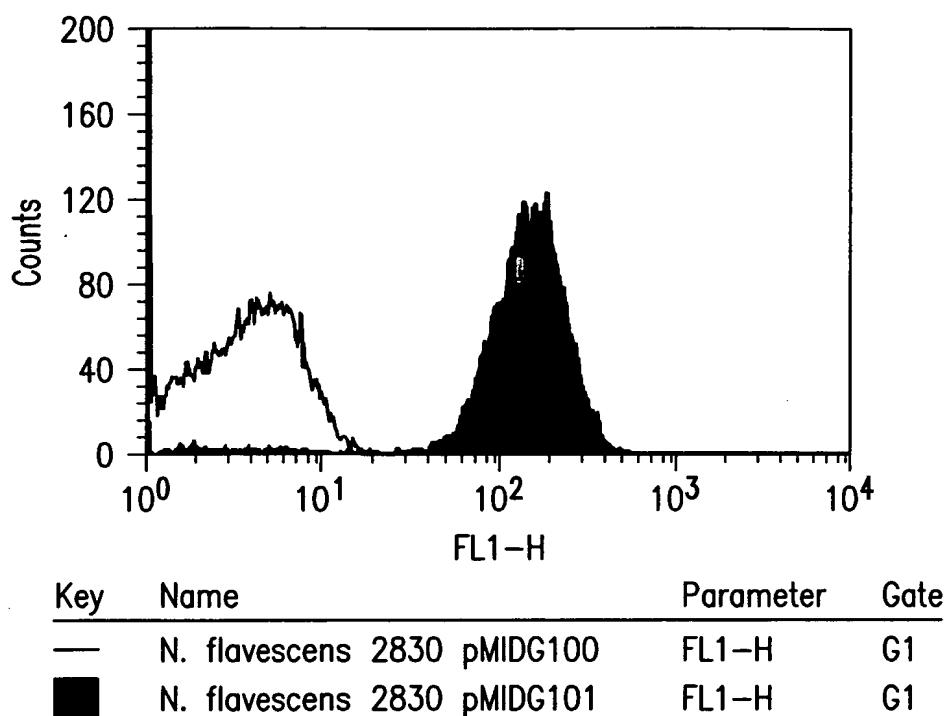
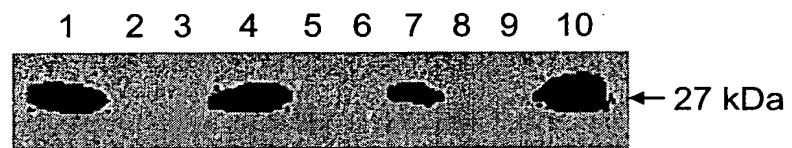


FIG.8E

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Dkt No. 1581.0840001/RWE/FRC; Group Unit: 1645  
Inventors: ROBINSON et al.  
Tel. No.: 202-371-2600  
For: Neisserial Vaccine Compositions and Methods

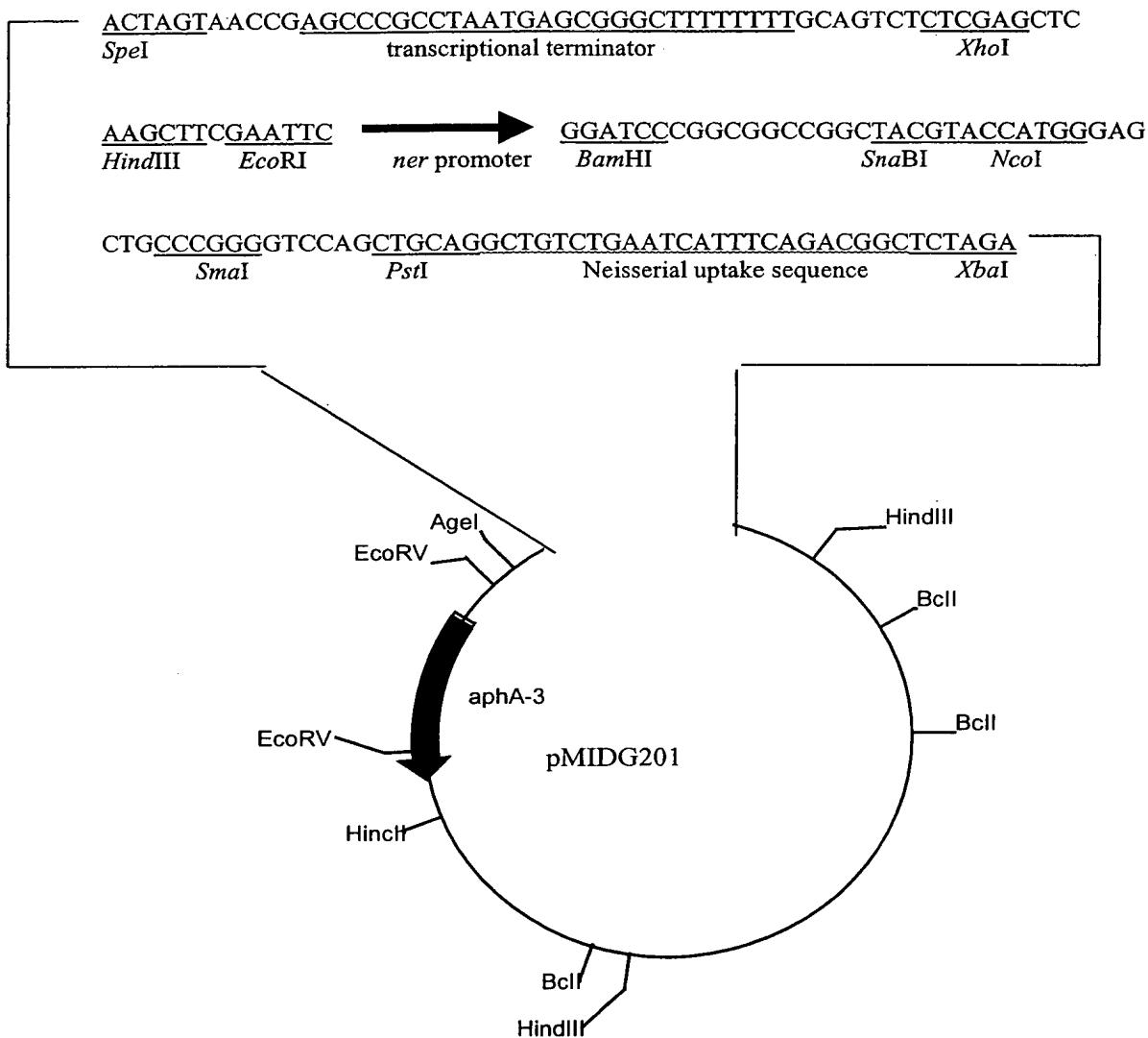


**FIG.9A**



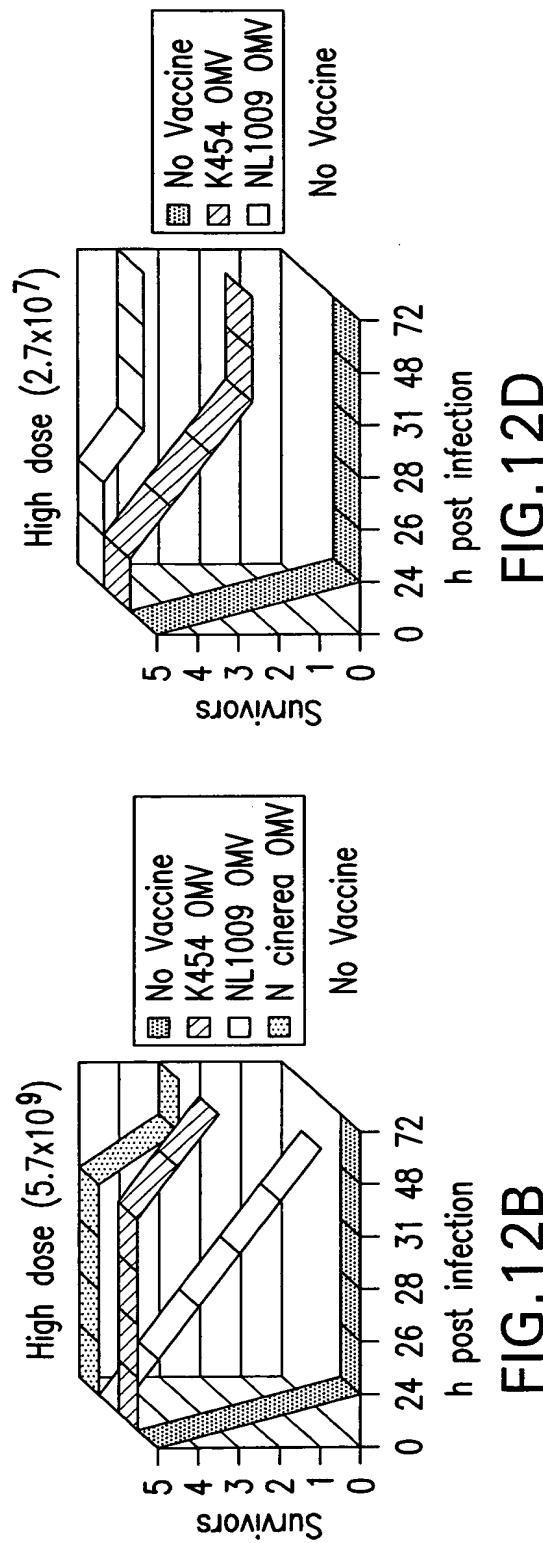
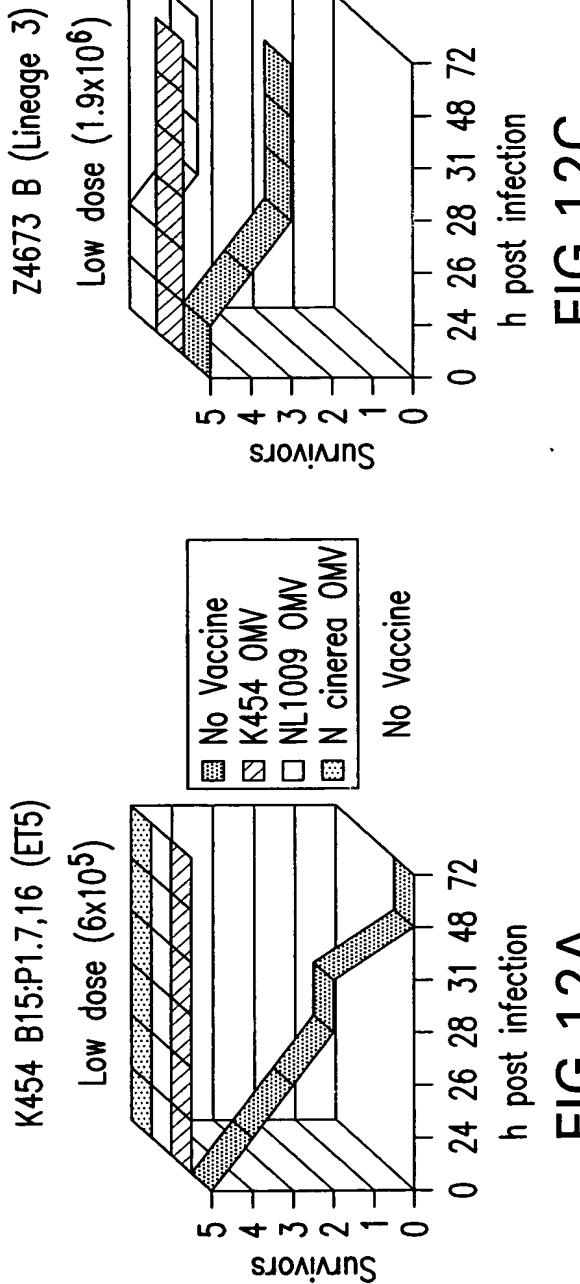
**FIG.9B**

Fig. 10



## Fig. 11

*NcoI* - tgaccataaaggAACCCAAatgaaaaAGCacttgcCACACTgattGCCCTGCTCCTGGCCGCCGcactggCGGAAGGCgcATCCttta  
RBS                    Start codon  
cgtccaaGCCatGCCGACACGCAAAGCCTCAAGCtCTTtaggtctGCCAAAGGCTtcAGCCCGCGcatCTCCGcaggCTACCGCATCAACGACCTCCGCTTCGCCGT  
cgattacACGCGCTACAAAAACTATAAAGCCCCATCCACCGATTCAAAACTTACAGCATGGCGCGTCCGCCATTACGACTTCGACACCCAATGCCCGTAAACCGTATCT  
cggCGCGCGCTTGAGCCTCAACCGCCCTCCGTGACTTGGCGCGAGCGACAGCTCAGCCAAACCTCCATGCCCTGGGTATTGACGGCGTAAGCTATGCCGTTA  
CCCCGAATGTCGATTTGATGCCGGTACCGCTACAACATCGGCAAAGTCAACACTGTCAAAACGTCGTTCCGGCGAACTGTCCGTCGGCGTCAAATTCTGA  
tatGCCCTT ATTCTGCAAACCGCCGAGCCTCGGGGTTTGTTCt – *PstI*  
Stop codon                    Transcription terminator



NZ 394/98 B4:P1.6 (Lineage 3)

Low dose ( $5.5 \times 10^6$ )

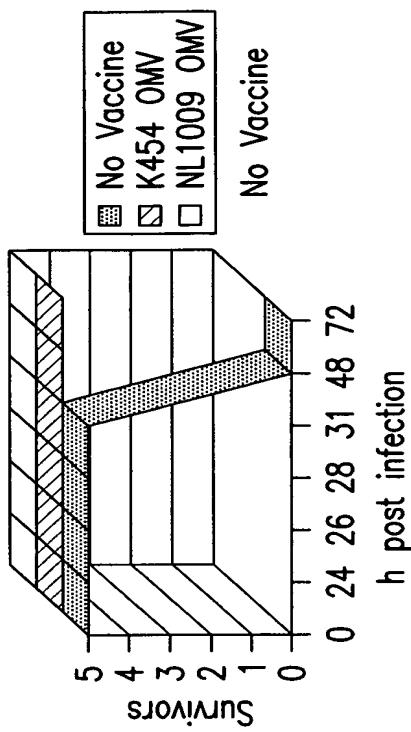


FIG. 12G

High dose ( $7.5 \times 10^7$ )

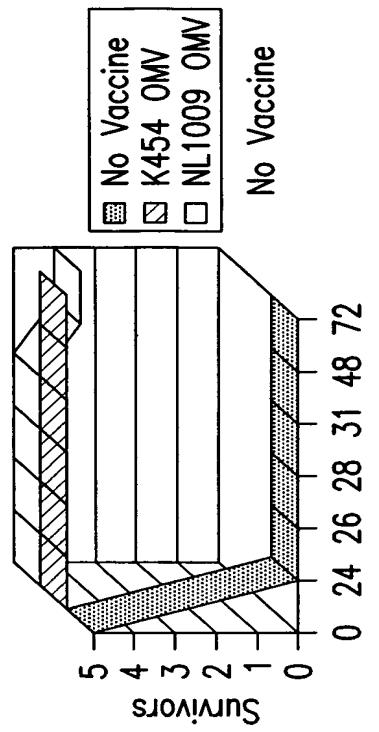


FIG. 12H

Z8948 C2a:P1.5,2 (ET37)

Low dose ( $1.6 \times 10^6$ )

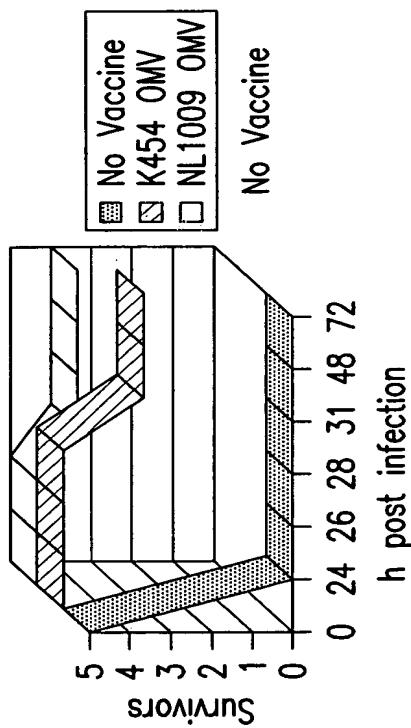


FIG. 12E

High dose ( $2.3 \times 10^6$ )

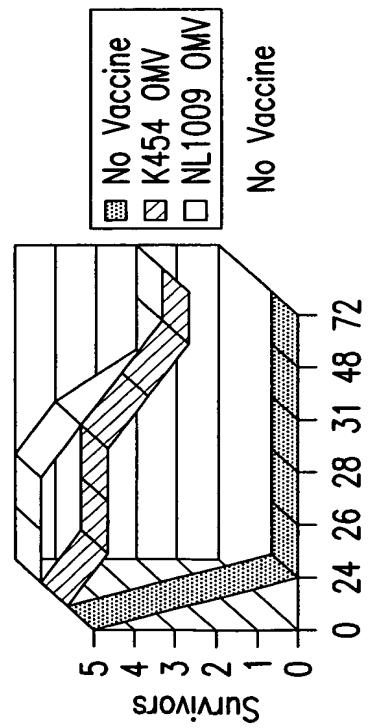


FIG. 12F

Z4662 B2b:P1.2 (A4)  
Low dose ( $1 \times 10^6$ )

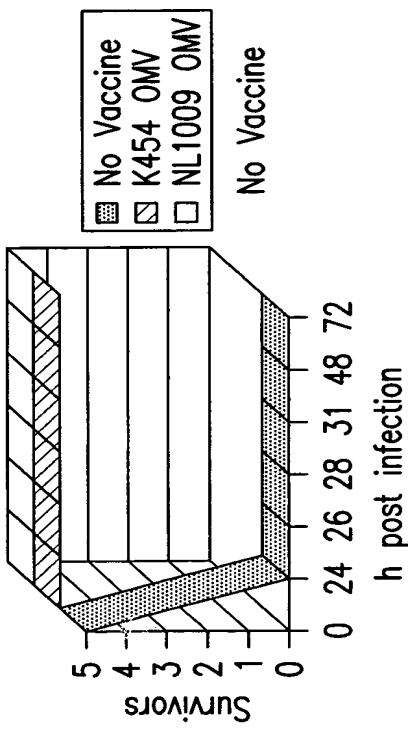


FIG. 12I

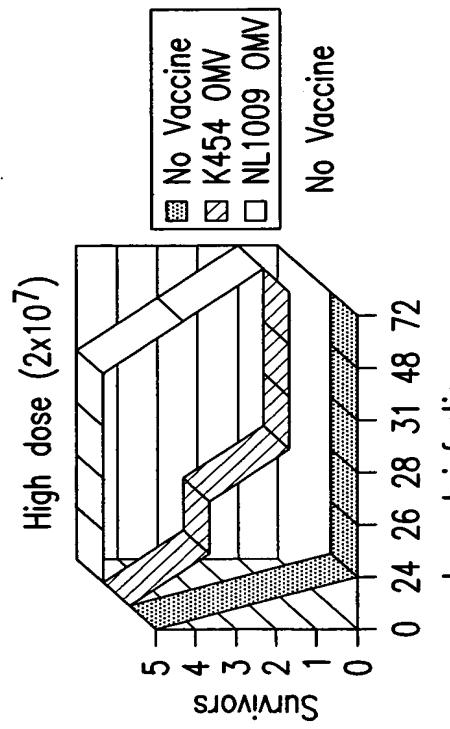
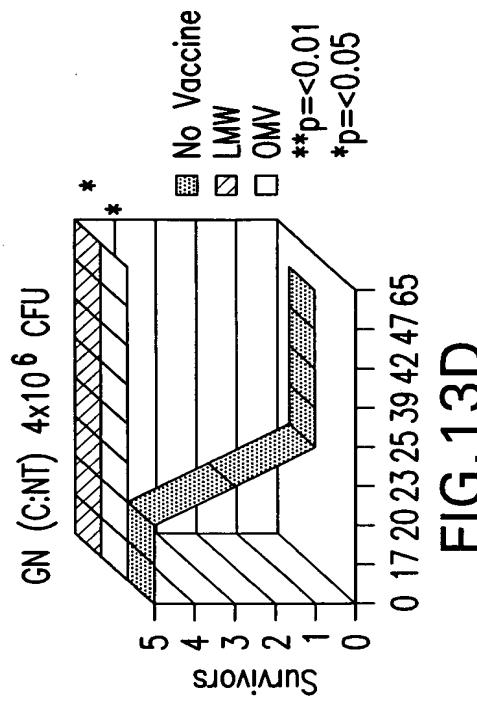
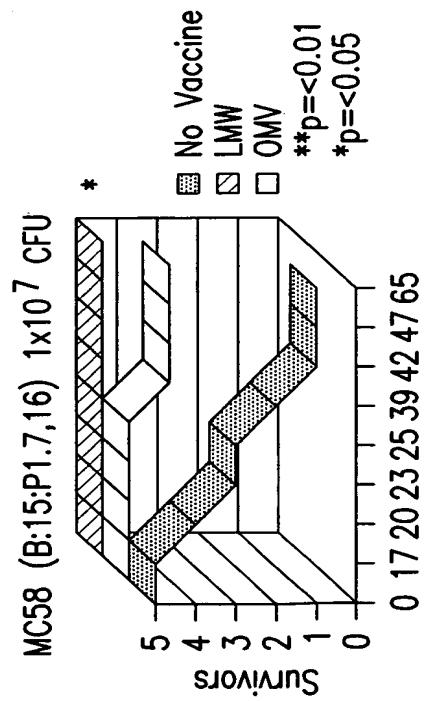
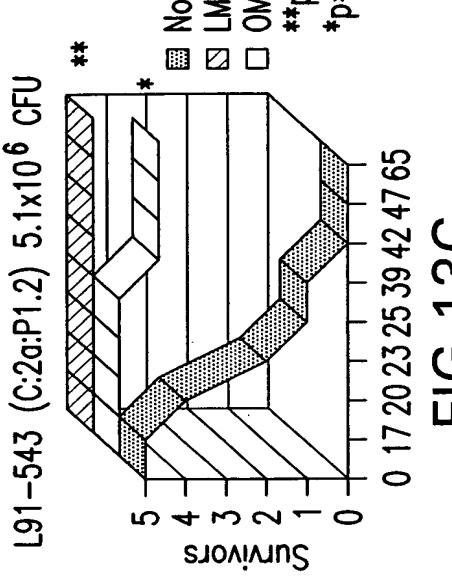
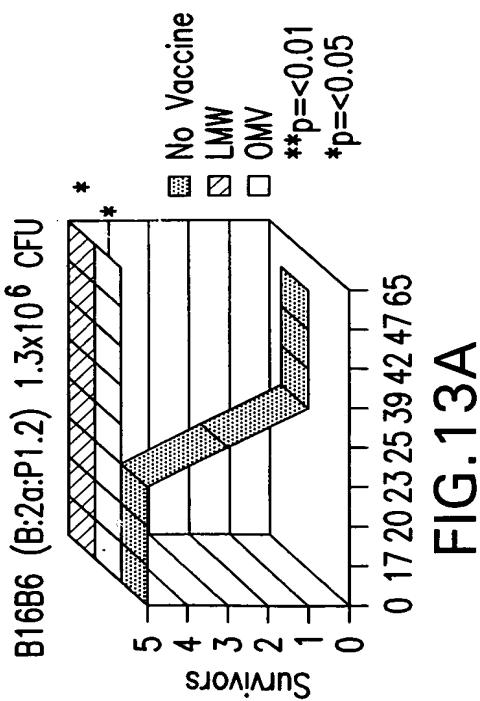


FIG. 12J



**Fig. 14. *N. lactamica* OMVs with Freund's or alum adjuvant protect mice against serogroup B meningococcal challenge (isolate K454)**

